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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,200	03/16/2001	Terence D. Neavin	51932USA4C.014	6668
32692	7590 04/25/2003	1		
3M INNOVATIVE PROPERTIES COMPANY			EXAMINER	
PO BOX 3342 ST. PAUL, MI	127 MN 55133-3427		LEYSON, JOSEPH S	
•			ART UNIT	PAPER NUMBER
			1722	

DATE MAILED: 04/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

<u>•</u> * · .		Application No.	plicant(s)				
	·	09/811,200	NEAVIN ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Joseph Leyson	1722				
	The MAILING DATE of this communication app						
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)[\]	Responsive to communication(s) filed on 16 M						
2a)	,—	s action is non-final.					
3)∟	3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims	ex parte quayre, 1000 O.D. 11, 4	00 0.0. 210.				
4)🖂	Claim(s) 1-18 is/are pending in the application						
4	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠	5)⊠ Claim(s) <u>6-10</u> is/are allowed.						
6)⊠	6)⊠ Claim(s) <u>1-5 and 11-18</u> is/are rejected.						
	Claim(s) is/are objected to.	, <b>·</b>					
8) Claim(s) are subject to restriction and/or election requirement.							
Application	on Papers						
	9) The specification is objected to by the Examiner.						
10)⊠ ⊺	10)⊠ The drawing(s) filed on <u>16 March 2001</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
	13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
-	a) ☐ All b) ☐ Some * c) ☐ None of:						
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
14)□ A	14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
	a) ☐ The translation of the foreign language provisional application has been received. 15)☑ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.3 5) Other:							

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- 1. The substitute specification filed on 16 March 2001 has been entered.
- 2. The status of parent case 09/229,724 on p. 1 of the specification should be updated, i.e., now abandoned or now U.S. Patent #.
- 3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the heaters attached to the external surface of the housing, as recited by claims 11-15, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

- 4. Claims 1-5 and 16-18 are objected to because of the following informalities: in claim 1, line 3, "channel" should be changed to --channels-- for proper idiomatic language.

  Appropriate correction is required.
- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

  Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 7. Claims 1-5 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chisholm et al.(-265) in view of Krumm(-370) and Matsui(-407).

Chisholm et al.(-265) disclose a feedblock including a manifold including first and second flow channels 30, 31, a first plurality of conduits 36 in fluid communication with the first flow channel 30, a second plurality of conduits 37 in fluid communication with the second flow channel 31, each

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conduit feeding its own respective slot die, each conduit having a first end and a second end, the first end of the conduits being in fluid communication with the flow channels 30, 31, and the second end of the conduits being in fluid communication with the slot die. The slot die includes an expansion section, a compression section and a slot section (figs. 1, 4, 5).

However, Chisholm et al.(-265) does not disclose the feedblock being defined by plates, at least one of the flow channels having a cross-sectional area that changes from a first position to a second position along the flow channel, or an axial rod heater located proximal to the conduits.

Krumm(-370) discloses extrusion flow channels having a cross-sectional area that changes from a first position to a second position along the flow channel enable uniform flow when being fed from the side of the feedblock (cols. 1-4; figs. 1A and 1C).

Matsui(-407) an axial rod heater 14 located proximal to flow conduits and capable of providing along its length controllable temperature zones. Matsui(-407) discloses that there can be plural heaters 14 (col. 6, lines 28-31).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the feedblock of Chisholm et al.(-265) such that at least one of the flow

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channels has a cross-sectional area that changes from a first position to a second position along the flow channel because such a modification would enable uniform flow as disclosed by Krumm(-370) and to further modify the feed block with the axial rod heater of Matsui(-407) because such a rod heater would enable temperature zones. As to the plate recitations, the mere fact that a given structure is integral does not preclude its consisting of various elements, Howard v. Detroit Stove Works, 150 U.S. 164. Note again that Matsui(-407) discloses that there can be plural heaters, as mentioned above.

8. Claims 11, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chisholm et al.(-265) in view of Krumm(-370) and Dinter et al.(-344).

Chisholm et al.(-265) disclose a feedblock including a manifold including first and second flow channels 30, 31, a first plurality of conduits 36 in fluid communication with the first flow channel 30, a second plurality of conduits 37 in fluid communication with the second flow channel 31, each conduit feeding its own respective slot die, each conduit having a first end and a second end, the first end of the conduits being in fluid communication with the flow channels 30, 31, and the second end of the conduits being in fluid communication with the slot die. The slot die includes an expansion section, a

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compression section and a slot section (figs. 1, 4, 5).

However, Chisholm et al.(-265) does not disclose the feedblock

being defined by plates, at least one of the flow channels

having a cross-sectional area that changes from a first position

to a second position along the flow channel, a housing or

heaters attached to the housing.

Dinter et al.(-344) disclose a housing 29 for holding an extrusion apparatus, and heaters 43 attached to the housing 29.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the feedblock of Chisholm et al.(-265) such that at least one of the flow channels has a cross-sectional area that changes from a first position to a second position along the flow channel because such a modification would enable uniform flow as disclosed by Krumm(-370) and to further modify the feed block with a housing with heaters because such a housing would hold the feedblock and maintain extrusion temperatures therein as disclosed by Dinter et al.(-344). As to the plate recitations, the mere fact that a given structure is integral does not preclude its consisting of various elements, Howard v. Detroit Stove Works, 150 U.S. 164. Note again that Matsui(-407) discloses that there can be plural heaters, as mentioned above.

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9. Claim 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chisholm et al.(-265) in view of Krumm(-370) and Dinter et al.(-344) as applied to claims 11, 14 and 15 above, and further in view of Matsui(-407).

Matsui(-407) an axial rod heater 14 located proximal to flow conduits and capable of providing along its length controllable temperature zones. Matsui(-407) discloses that there can be plural heaters 14 (col. 6, lines 28-31).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the feed block with the axial rod heater of Matsui(-407) because such a rod heater would enable temperature zones.

10. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See Miller v. Eagle Mfg. Co., 151 U.S. 186 (1894); In re Ockert, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

11. Claim 1 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of copending Application No. 09/810,916. This is a provisional double

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patenting rejection since the conflicting claims have not in fact been patented.

- 12. Claims 6-10 are allowed.
- 13. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or reasonably suggest the combination of elements defining the feedblock as recited by instant claims 6-10, particularly including the manifold plate including the at least one first and second supplemental channels having the top and bottom portions, the top portion being bounded by the manifold plate, and the bottom portion being bounded in the gradient plate and lying opposite of the flow channels.
- 14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cloeren(-474) and Voss(-494) are cited as of interest.
- 15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Leyson whose telephone number is (703) 308-2647. The examiner can normally be reached on M-F(8:30-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (703) 308-0457. The fax phone numbers for the organization where this application or proceeding is assigned

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are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

April 21, 2003

JAMES P. MACKEY PRIMARY EXAMINER

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